Supreme Court, U.S.
FILED

165 D

10-50 JUN 30 2010

No. OFFICE OF THE CLERK

IN THE
SUPREME COURT OF THE UNITED STATES

DEREK J. LACKEY,
Petitioner,

v.

DAVID J. KAPPOS, UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE,
Respondent.

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

PETITION FOR WRIT OF CERTIORARI

GREGORY T. ZALECKI
Counsel of Record
Law Offices of Gregory T. Zalecki
12900 HALL RD., SUITE 400
Sterling Heights, MI 48313
GTZalecki@sbcglobal.net
(586) 254-6113
Attorney for Petitioner

QUESTIONS PRESENTED FOR REVIEW

1. Whether substituting one fabrication material (metal) for another (plastic) to produce a previously unknown significant advance in the state of the art of air admittance valves is per se obvious under 35 USC 103(a), thereby foreclosing further consideration of patentability.

PARTIES TO THE PROCEEDINGS

Petitioner

Derek J. Lackey

Respondent

David J. Kappos, under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

Other Parties

None

CORPORATE DISCLOSURE STATEMENT

There is no parent corporation or any publicly held company that owns 10% or more of the stock of Derek J. Lackey.

TABLE OF CONTENTS

QUESTIONS PRESENTED FOR REVIEW ..... -i-

PARTIES TO THE PROCEEDINGS ..... -ii-
CORPORATE DISCLOSURE STATEMENT
..... -ii-

TABLE OF CONTENTS ..... -iii-

TABLE OF AUTHORITIES ..... -vi-

STATEMENT OF OPINIONS AND ORDERS BELOW
..... -1-

STATEMENT OF JURISDICTIONAL BASIS ... -1-

CONSTITUTIONAL PROVISIONS, TREATIES, STATUTES, ORDINANCES, AND REGULATIONS ..... -1-

STATEMENT OF THE CASE ..... -2-
THE PROBLEM AND THE CLAIMED INVENTION WHICH SOLVES THE PROBLEM ..... -2-
PROCEEDINGS IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
..... -5-
THE FEDERAL CIRCUIT'S DECISION .. -7-

ARGUMENT ..... -8-
SUBSTITUTING ONE FABRICATION MATERIAL FOR ANOTHER TO

PRODUCE A PREVIOUSLY UNKNOWN SIGNIFICANT ADVANCE IN THE STATE OF THE ART OF AIR ADMITTANCE VALVES IS NOT PER SE OBVIOUS UNDER 35 U.S.C. § 103(a), THEREBY FORECLOSING FURTHER CONSIDERATION OF PATENTABILITY ..... -8-

IN *UNITED STATES* V. *ADAMS*, 383 U. S. 39, 40 (1966) PATENTABILITY WAS BASED UPON THE SUBSTITUTION OF ONE MATERIAL FOR ANOTHER MATERIAL ..... -11-

PETITIONER IS LIKELY TO PREVAIL ON THE ISSUES LEFT UNDECIDED BY THE FEDERAL CIRCUIT BECAUSE NEITHER THE BETHUNE PATENT NOR THE BURKE PATENT DISCLOSE A METALLIC AIR ADMITTANCE VALVE ..... -15-

CONCLUSION ..... -17-

APPENDIX

APPENDIX A

April 9, 2010 Opinion of the United States Court of Appeals for the Federal Circuit 1a

APPENDIX B

May 28, 2009 Decision of the Board of Patent Appeals and Interferences of the United States Court Patent and Trademark Office 7a

APPENDIX C

April 9, 2010 Judgment of the United States Court of Appeals for the Federal Circuit 24a

TABLE OF AUTHORITIES

CASES

Graham v. *John Deere*,
383 U.S. 1, 17-18 (1966) ..... -10-, -14-

In re Kotzab,
217 F.3d 1365, 1369 (Fed. Cir. 2000) ..... -9-

In re Kumar,
418 F.3d 1361, 1365 (Fed. Cir. 2005) ..... -9-

KSR Int'l Co. v. *Teleflex, Inc.*,
550 U.S. 398, 405 (2007) ..... -9-, -11-, -14-

United States v. *Adams, Inc.*,
383 U.S. 39 (1966) ..... -9-, -11-

STATUTES and COURT RULES

28 U.S.C. § 1254(1) ..... -1-

28 U.S.C. § 1295(a)(4)(A) ..... -7-

35 U.S.C. § 134 ..... -6-, -7-

35 U.S.C. § 141 ..... -6-, -7-

35 U.S.C. § 142 ..... -6-

35 U.S.C. § 6(b) . . . . . -7-

35 USC § 102(b) . . . . . -6-, -7-, -15-

35 USC § 103(a) . . . . . -1-, -6-, -9-, -10-

STATEMENT OF OPINIONS AND ORDERS BELOW

The April 9, 2010 opinion of the U.S. Court of Appeals for the Federal Circuit (App., infra, 1a-23a) is unreported.

The May 28, 2009 opinion of the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office (App., infra, 7a-23a) is unreported.

STATEMENT OF JURISDICTIONAL BASIS

The judgment of the U.S. Court of Appeals for the Federal Circuit was entered on April 9, 2010. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

CONSTITUTIONAL PROVISIONS, TREATIES, STATUTES, ORDINANCES, AND REGULATIONS

35 USC § 103(a) provides:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the

invention was made.

STATEMENT OF THE CASE

THE PROBLEM AND THE CLAIMED INVENTION WHICH SOLVES THE PROBLEM

Appellant's patent application claims are directed to **metallic** air admittance valves.

Traditional commercial and residential plumbing systems contain elaborate vent piping connected to each fixture. The vent piping adds a significant cost to new construction. It often makes retrofitting new fixtures into an existing structure expensive and difficult because of the need to route new vent pipes through existing walls and an existing roof. The use of air admittance valves partially solves this problem. An air admittance valve is essentially an air check valve. It is usually attached near the trap of a fixture. It is a small device which is easy to install. It permits air to flow into a drain waste vent system, thereby preventing the siphoning of a trap, but does not permit sewer gas to escape. Thus, an air admittance valve has the potential to significantly reduce construction and remodeling costs because it does away with the need for much vent piping.

Air admittance valves are not universally accepted as a replacement for vent piping terminating outside of a building. The housing of currently available air admittance valves is plastic. The use of plastic air admittance valves in buildings can create safety problems when they are subjected to a fire. The

valves are often needed to be installed in air plenum areas of buildings. An air plenum area of a building feeds the ventilating system of the building. When plastic is subjected to fire, noxious and toxic fumes result. Further, if an air admittance valve fails due to fire, sewer gases will enter the plenum. As a result of these potential problems, the use of plastic air admittance valves in the plenum areas of buildings is often legally prohibited or undesirable. The market needs an air admittance valve which will not produce toxic fumes when subjected to fire and that is less likely to fail when subjected to fire.

One attempt to solve this problem appears within U.S. patent number 6,799,600 (O'Neal). There, a metal housing was provided which surrounds an installed plastic air admittance valve. A simpler and less costly approach to solving the problem is desirable.

Appellant's invention provides this simpler and less costly approach to solving the problem. Although his solution is not complicated, he is the first to offer it. His solution allows air admittance valves to be economically installed in areas previously thought to not be available for air admittance valve use because of safety laws.

Air admittance valves are commonly available. The typical current air admittance valve has a tubular body with a valve chamber integral to one end of the tubular body. The valve chamber contains a valve. The valve chamber has an air inlet. The valve permits the flow of air when air pressure outside of the valve is higher than air pressure within and on the other side of the valve. When the pressure differential is reversed air flow is prevented. Thus, when the air admittance

valve is attached to a vent pipe of a plumbing system it will prevent high-pressure sewer gases from escaping into the atmosphere and will allow atmospheric pressure air to flow into the valve and prevent siphoning from trap water when the trap pressure is lowered by the flow of water. The tubular body and the valve chamber are typically one integral plastic part. Because the body and chamber of current air admittance valves are plastic, the air admittance valve is subject to fire hazard risks.

This invention uses a tubular body and integral valve chamber which is fabricated from metal. Metal will not burn in a building fire. Metal does not give off noxious or toxic fumes when subjected to fire. Therefore, an air admittance valve having a metallic tubular body and integral valve chamber can be used in the plenum area of a building without a risk of toxic fumes being distributed through the building whenever the valve is subjected to fire. Further, the metallic tubular body and valve chamber provide much better protection from fire to the valve within the valve chamber. This lowers the risk of sewer gases escaping into a building during a fire. The preferred metals for the construction of the tubular body and valve chamber are copper, brass, black steel and cast iron. Many plumbing devices and pipes are constructed from copper, brass, black steel and cast iron. Therefore, the consistency of material will be maintained. Copper, brass, black steel and cast iron are resistive to corrosion. Copper, brass, black steel and cast iron are not expensive materials.

The claimed metallic air admittance valve is intended for use with any plumbing system having one

or more waste water discharge devices. Such discharge devices include sinks, basins, tubs, water closets and urinals. The waste water discharge device is vented with a metallic air admittance valve.

The pertinent independent claims and dependent claims involved in the appeal to the United States Court of Appeals for the Federal Circuit were as follows:

1. An air admittance valve having a tubular body with a valve chamber integral to one end of the tubular body, said valve chamber having a valve and an air inlet, wherein the tubular body and the valve chamber are fabricated from metal.
2. The air admittance valve of claim 1, further comprising a metallic vent pipe coupler attached to the other end of the tubular body.
11. A plumbing system having one or more wastewater discharge devices vented with an air admittance valve having a tubular body with a valve chamber integral to one end of the tubular body, said valve chamber having a valve and an air inlet, wherein the tubular body and the valve chamber are fabricated from metal.
12. The plumbing system of claim 11, further comprising a metallic vent pipe coupler attached to the other end of the tubular body.

PROCEEDINGS IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant, Derek J. Lackey, filed a patent application with the United States Patent and Trademark Office ("PTO") on April 25, 2005. After

receiving an initial rejection of all claims followed by a final rejection of all claims, appellant filed a notice of appeal with the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office. This appeal was pursuant to 35 U.S.C. § 134. On May 28, 2009 the Board of Patent Appeals and Interferences rendered a decision adverse to the appellant, wherein the examiner's rejection of all claims was affirmed. On July 23, 2009 appellant filed a Notice of Appeal to the Court of Appeals for the Federal Circuit with the United States Patent and Trademark Office. This appeal was authorized by 35 U.S.C. § 141. It was timely pursuant to 35 U.S.C. § 142. This appeal is from a final order that disposes all of Appellant's claims.

Claims 1-3, 5-7, 9, 10, 13, 15-17, 19 and 20 were rejected by the examiner and by the PTO's Board of Patent Appeals and Interferences ("Board") under 35 USC 103(a) as being unpatentable over Ericson in view of Kohn (US patent number 6,845,527). The examiner concluded "it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the valve of Ericson with either copper, black steel or cast-iron as, for example, taught by Kohn in order to provide specific metals and materials that are suitable for manufacturing the components of a plumbing system valve."

Claims 1, 2, 11 and 12 were rejected by the examiner and by the Board under 35 USC § 102(b) as being anticipated by Ericson (US patent number 4,535,807). This issue was conceded by the USPTO in the United States Court Of Appeals for the Federal Circuit. Footnote 3 (page 3) of appellee's brief in the

Court of Appeals states that "The director agrees with Lackey that Ericson does not disclose the specific material from which his air admittance valve should be made."

Claims 1-3, 7, 11-13 and 17 were rejected by the examiner and by the Board under 35 USC § 102(b) as being anticipated by Bethune (US patent number 4,811,753).

Claims 1, 2, 4, 8, 11, 12, 14 and 18 were rejected by the examiner and by the Board under 35 USC § 102(b) as being anticipated by Burke (US patent number 2,347,988). App., *infra*, 9a.

THE FEDERAL CIRCUIT'S DECISION

Lackey appealed the USPTO examiner's rejection to the PTO Board of Patent Appeals and Interferences under 35 U.S.C. § 134(a). The PTO Board had jurisdiction pursuant to 35 U.S.C. § 6(b). The PTO Board affirmed the examiner on May 28, 2009.

Lackey appealed the PTO Board's decision to the Court of Appeals for the Federal Circuit under 35 U.S.C. § 141. The Federal Circuit had jurisdiction over the appeal pursuant to 28 U.S.C. § 1295(a)(4)(A). The Federal Circuit affirmed the Board's decision on April 9, 2010. App., *infra*, 1a-6a.

The Federal Circuit affirmed the obviousness ruling of the Board without reaching the Board's other grounds. The Federal Circuit concluded (at App., *infra*, 6a) as follows:

> Finally, we conclude that it would have been obvious to a person having ordinary skill in the art to combine the teachings

> of Ericson and Kohn to make Appellant's claimed invention. A simple substitution of one known element for another known element in the field to obtain predictable results is obvious. See KSR, 550 U.S. at 416. In this case, the claimed invention may be obtained merely by making Ericson's valve out of either copper, black steel or cast iron as taught by Kohn. This is simply the substitution of one known material for a generic metal to obtain predictable results. Furthermore, Appellant introduced no evidence showing unexpected results or secondary indicia of nonobviousness. Therefore, we conclude that the Board did not err in rejecting the claims for obviousness over Ericson in view of Kohn and we affirm the Board's decision.

ARGUMENT

SUBSTITUTING ONE FABRICATION MATERIAL FOR ANOTHER TO PRODUCE A PREVIOUSLY UNKNOWN SIGNIFICANT ADVANCE IN THE STATE OF THE ART OF AIR ADMITTANCE VALVES IS NOT PER SE OBVIOUS UNDER 35 U.S.C. § 103(a), THEREBY FORECLOSING FURTHER CONSIDERATION OF PATENTABILITY

The Federal Circuit has decided an important federal question relating to the standards used to

decide whether an invention is obvious. The decision of the Federal Circuit conflicts with *United States* v. *Adams*, 383 U. S. 39, 40 (1966) and *KSR Int'l Co.* v. *Teleflex, Inc.*, 550 U.S. 398, 416 (2007).

Section 103(a) of title 35 of the U.S. Code "forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co.* v. *Teleflex, Inc.*, 550 U.S. 398, 405 (2007) (quoting 35 U.S.C. § 103(a)). "Determination of obviousness under 35 U.S.C. § 103 is a legal conclusion based on underlying facts." *In re Kumar*, 418 F.3d 1361, 1365 (Fed. Cir. 2005). The Federal Circuit court reviews "the Board's ultimate determination of obviousness de novo," while the Board's underlying findings of fact are reviewed under a substantial evidence standard. *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000).

Claims 1-3, 5-7, 9, 10, 13, 15-17, 19 and 20 were rejected under 35 USC 103(a) as being unpatentable over Ericson in view of Kohn (US patent number 6,845,527). The examiner concluded "it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the valve of Ericson with either copper, black steel or cast-iron as, for example, taught by Kohn in order to provide specific metals and materials that are suitable for manufacturing the components of a plumbing system valve." The Federal Circuit held (at App., *infra*, 6a) that "A simple substitution of one known element for

another known element in the field to obtain predictable results is obvious."

35 USC 103(a) provides:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

An invention is not patentable if "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." *KSR Int'l Co.* v. *Teleflex Inc.*, 550 U.S. 398, 406 (2007) (citing 35 U.S.C. § 103(a)). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art, (2) the differences between the claimed subject matter and the prior art, (3) the level of ordinary skill in the art, and (4) any secondary indicia of nonobviousness. *Graham* v. *John Deere*, 383 U.S. 1, 17-18 (1966).

The Federal Circuit failed to consider prior art which teaches away from the claimed invention. The need for a metallic air admittance valve is demonstrated by the 2004 patent issued to O'Neal

(A108 of Federal Circuit joint appendix, 6,799,600). In that patent a plastic air admittance valve is protected from fire by a protective metal housing. Applicant's device presents a much simpler solution for the protection of an air admittance valve from fire. Nothing within Kohn provides a teaching, suggestion or motivation to fabricate an air admittance valve with a metallic tubular body and a metallic valve chamber.

IN *UNITED STATES* V. *ADAMS*, 383 U. S. 39, 40 (1966) PATENTABILITY WAS BASED UPON THE SUBSTITUTION OF ONE MATERIAL FOR ANOTHER MATERIAL

In *KSR Int'l Co.* v. *Teleflex, Inc.*, 550 U.S. 398, 416 (2007) the court quoted from *United States* v. *Adams, Inc.*, 383 U.S. 39 (1966) with approval as follows:

> In *United States* v. *Adams*, 383 U. S. 39, 40 (1966), a companion case to *Graham*, the Court considered the obviousness of a "wet battery" that varied from prior designs in two ways: It contained water, rather than the acids conventionally employed in storage batteries; and its electrodes were magnesium and cuprous chloride, rather than zinc and silver chloride. The Court recognized that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a

predictable result. 383 U. S., at 50–51. It nevertheless rejected the Government's claim that Adams's battery was obvious. The Court relied upon the corollary principle that when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious. Id., at 51–52. When Adams designed his battery, the prior art warned that risks were involved in using the types of electrodes he employed. The fact that the elements worked together in an unexpected and fruit-ful manner supported the conclusion that Adams's design was not obvious to those skilled in the art.

....

[at p. 418] a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all,

> instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

The USPTO and the Federal Circuit position is that the prior art discloses air admittance valves and the prior art discloses plumbing parts fabricated from metal and that because these elements were independently known in the prior art applicant's claimed invention is automatically obvious. One should look at the purpose for fabricating a plumbing part from metal. For most plumbing parts the purpose is simply to provide a rigid durable structure. On the other hand, **the purpose of fabricating from metal with respect to applicant 's claimed invention is to prevent sewer gas from escaping into a building when that plumbing part is subjected to fire.** This **different purpose** for the use of fabricating from metal pushes in the direction of nonobviousness. The fact that the prior art teaches away from metallic air admittance valves also pushes in the direction of nonobviousness.

Here, the prior art teaches away from metallic air admittance valves. As previously indicated in the specification of the patent application many governmental entities prohibit the use of plastic air admittance valves because such valves may admit noxious fumes from burning plastic and, more importantly, can allow the escape of sewer gas into a building if the valve were to be subjected to fire.

The need for a metallic air admittance valve is demonstrated by the 2004 patent issued to O'Neal (U.S. patent no. 6,799,600). This argument was ignored by the Board and by the Federal Circuit. In

that patent a plastic air admittance valve is protected from fire by a protective metal housing. Applicant 's device presents a much simpler solution for the protection of an air admittance valve from fire. Nothing within Kohn provides a teaching, suggestion or motivation to fabricate an air admittance valve with a metallic tubular body and a metallic valve chamber.

Here, the USPTO and the Federal Circuit rely upon hindsight reasoning. They are looking at applicant's invention and distilling it into a valve which admits air and fabrication from metal. After this distillation they concluded the combination to be obvious. This is hindsight reasoning. Hindsight reasoning is cautioned against by the Supreme Court. At page 421 of *KSR* the Court stated:

> A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. See *Graham*, 383 U. S., at 36 (warning against a "temptation to read into the prior art the teachings of the invention in issue" and instructing courts to "'guard against slipping into the use of hindsight'" ... Rigid preventative rules that deny fact finders recourse to common sense, however, are neither necessary under our case law nor consistent with it.

Lackey has invented a superior air admittance valve. It successfully addresses the concerns of plumbing code drafters worried about the emission of noxious fumes into buildings. It is superior to O'Neal's device because it is much simpler and does not have a

plastic valve body, as O'Neal does. Lackey should not be denied a patent because of the simplicity of his invention.

PETITIONER IS LIKELY TO PREVAIL ON THE ISSUES LEFT UNDECIDED BY THE FEDERAL CIRCUIT BECAUSE NEITHER THE BETHUNE PATENT NOR THE BURKE PATENT DISCLOSE A METALLIC AIR ADMITTANCE VALVE

The Federal Circuit did not reach two of the grounds for the Board's affirmance. The petitioner is likely to prevail on these grounds. The grounds involve the conclusion of the Board that petitioner's claims are anticipated by the Bethune patent (US patent no. 4,811,753) and the Burke patent (US patent no. 2,347,988). A cursory review of the patents relied upon by the Board shows that they are inappropriate for an anticipation rejection under 35 USC 102(b).

The USPTO erroneously assumes that Bethune and Burke disclose air check valves and, further, that those check valves are air admittance valves. The Bethune device does not function as an air check valve. As stated in the abstract, the Bethune device blocks the reverse flow of a liquid (water), not air. Figure 3 and Figure 6 of the Bethune patent show floating check balls (reference numbers 33 and 84). Those balls block an opening above them when they rise. The balls are caused to rise by a liquid, not air. See column 3, line 47 through column 4, line 7. Additionally, see column 1, lines 51-59. There it is stated that "obnoxious gases may pass upward to the drain system and be expelled by the vent." Also see column 2, lines 40-46 wherein it

is stated that "the check valve is located in the outer housing passageway to allow the passage of air in one direction while blocking the passage of water in the opposite direction so that the outside vent air may pass into the drain vent to vent the drain line" and claim 1 (line 30) wherein the check valve is described as allowing "the passage of air in one direction while blocking the passage of water in the opposite direction." The Bethune device allows sewer gas to vent. Thus, it is crystal clear that the Bethune device will not function as an air check valve. Therefore, a metallic air admittance valve is not anticipated by Bethune, even using the expanded definition of an air admittance valve urged by the USPTO.

Similarly, the Burke device, which was patented some 30 to 40 years before the invention of air admittance valves, will not function as an air check valve. In other words, if it's bottom end is attached to a pipe containing pressurized sewer gas some of that sewer gas will be expelled through the top end of the Burke device. The Burke device is also intended for use within hydraulic or liquid systems. Liquid enters the top end and exits the bottom end. See, for example, the first paragraph of the Burke patent. In the second column of page 3 beginning at line 44 Burke states "In normal or at rest position, as above noted, there is a small annular space between the lower portion 40b of the valve element and the convex shoulder or seat 10b..." This means that the pressurized sewer gas will be allowed to escape from the valve, rather than being checked. This can be seen in Figure 1 and Figure 2 of Burke. Sewer gas in the vicinity of reference number 13 will pass through this described annular space and

reach an air hole (reference number 28) and thereby be vented to the atmosphere. Thus, the Burke hydraulic valve does not function as an air check valve and, therefore, does not disclose an air admittance valve even under the disputed definition of an air admittance valve employed by the USPTO.

CONCLUSION

For these reasons, the petition for a writ of certiorari should be granted.

Respectfully submitted,

/s/_____
GREGORY T. ZALECKI
Counsel of Record
Attorney for Petitioner
12900 HALL RD., SUITE 400
STERLING HEIGHTS, MI 48313
GTZalecki@sbcglobal.net
(586) 254-6113

APPENDIX A

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

2009-1532
(Serial No. 10/908,004)

IN RE DEREK J. LACKEY

Gregory T. Zalecki, Law Offices of Gregory T. Zalecki, of Sterling Heights, Michigan, for appellant.

Raymond T. Chen, Solicitor, Office of the Solicitor, United States Patent and Trademark Office, of Arlington, Virginia, for the Director of the United States Patent and Trademark Office. With him on the brief were Benjamin D.M. Wood and Thomas L. Stoll, Associate Solicitors.

Appealed from: United States Patent and Trademark Office
Board of Patent Appeals and Interferences

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

2009-1532
(Serial No. 10/908,004)

IN RE DEREK J. LACKEY

Appeal from the United States Patent and Trademark Office, Board of Patent Appeals and Interferences.

DECIDED: April 9, 2010

Before LOURIE, GAJARSA, and MOORE, Circuit Judges.

GAJARSA, Circuit Judge.

Appellant Derek J. Lackey ("Appellant") filed a patent application with the United States Patent and Trademark Office ("PTO") relating to metallic air admittance valves for use in plumbing systems. The PTO's Board of Patent Appeals and Interferences ("Board") held the patent claims invalid on multiple grounds, including that they would have been obvious at the time the invention was made. For the reasons stated below, we affirm the obviousness ruling and therefore sustain the Board's decision without reaching the Board's other grounds.

Appellant's patent application is directed to metallic air admittance valves. An air admittance valve is a check valve that provides ventilation to plumbing system drain lines while preventing noxious gases from escaping the drain lines. The Appellant's specification discloses that an air admittance valve is essentially an air check valve that is usually attached near the trap of a fixture. The air admittance valve permits air flow into a drain waste vent system, thereby preventing the siphoning of a trap and sewer gases from escaping.

Claim 1, reproduced below, is representative of the claims on appeal:

1. An air admittance valve having a tubular body with a valve chamber integral to one end of the tubular body, said valve chamber having a valve and an air inlet, wherein the tubular body and the valve chamber are fabricated from metal.

During prosecution, the examiner rejected the claims for obviousness based on the teachings of two prior art patents related to plumbing systems. The first patent, United States Patent No. 4,535,807 ("Ericson"), is entitled "Air Valve Device for Ducts." Ericson discloses an air valve having a valve body connected to an air duct, a valve chamber, an air inlet, and a membrane or annular flap (or valve). Ericson teaches that the air valve is used in combination with a sanitary appliance, wherein the air valve eliminates a partial vacuum that can lead to contaminated water from the sanitary appliance being sucked therein. The second patent, United States Patent No. 6,845,527 ("Kohn"), is entitled "Valve Construction." Kohn teaches plumbing fixtures that produce a reliable

drainage system for a building. Kohn teaches that these fixtures may be fabricated in a multitude of materials, including copper, black steel and cast iron.

The Board affirmed the examiner's obviousness rejections of Appellant's claims covering metallic air admittance valves. In particular, the Board found that Ericson's disclosure of air admittance valves for plumbing systems in light of Kohn's teachings that plumbing fixtures may be constructed out of a variety of metals rendered Appellant's invention obvious to a person of ordinary skill in the art at the time the invention was made.

On appeal, Appellant challenges the Board's ruling on the obviousness rejections of claims 1, 2, 11 and 12 based on Ericson in view of Kohn. We have jurisdiction to review the Board's ruling under 28 U.S.C. § 1295(a)(4)(A). We review the Board's ultimate determination of obviousness de novo and its underlying findings of fact for substantial evidence. In re Kotzab, 217 F.3d 1365, 1369 (Fed. Cir. 2000).

An invention is not patentable if "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007) (citing 35 U.S.C. § 103(a)). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art, (2) the differences between the claimed subject matter and the prior art, (3) the level of ordinary skill in the art, and (4) any secondary indicia

of nonobviousness. Graham v. John Deere, 383 U.S. 1, 17-18 (1966).

The Supreme Court recently clarified the law relating to obviousness of an invention, explaining that where "a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result." KSR, 550 U.S. at 416 (citing United States v. Adams, 383 U.S. 39, 40 (1966)). "Often, it will be necessary for a court to look to interrelated teachings of multiple patents . . . and the background knowledge possessed by a person having ordinary skill in the art . . . to determine 2009-1533
whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." KSR, 550 U.S. at 418.

On appeal, Appellant contends that Ericson does not disclose an air admittance valve as required by claims 1 and 11. Appellant's argument is not persuasive. The Board found that Ericson discloses an air valve having a valve body connected to an air duct, a valve chamber, an air inlet, and a membrane or annular flap (or valve). These elements are plainly disclosed in the written description of the Ericson patent. Ericson also teaches that the air valve is used in combination with a plumbing system, or "sanitary appliance." The Board concluded that the ordinary meaning of the word "sanitary" includes "of, or relating to, or used in the disposal of sewage." Bd. Op. at 14 (citing Merriam-Webster's Collegiate Dictionary (10th ed. 1996)). Accordingly, the Board's finding that Ericson discloses an air admittance valve for use in

plumbing systems is supported by substantial evidence.

Appellant also argues that Kohn is non-analogous art. We disagree. The analogous art test requires that the Board show that a reference is either in the field of the applicant's endeavor or is reasonably pertinent to the problem with which the inventor was concerned to rely on the reference as a basis for rejection. In re Kahn, 441 F.3d 977, 986-87 (Fed. Cir. 2006). In this case, Ericson and Kohn are from the same field of endeavor; both patents disclose that their inventions are used with plumbing fixtures. Accordingly, the Board's finding that Ericson and Kohn are analogous art is supported by substantial evidence. See id.

Finally, we conclude that it would have been obvious to a person having ordinary skill in the art to combine the teachings of Ericson and Kohn to make Appellant's claimed invention. A simple substitution of one known element for another known element in the field to obtain predictable results is obvious. See KSR, 550 U.S. at 416. In this case, the claimed invention may be obtained merely by making Ericson's valve out of either copper, black steel or cast iron as taught by Kohn. This is simply the substitution of one known material for a generic metal to obtain predictable results. Furthermore, Appellant introduced no evidence showing unexpected results or secondary indicia of nonobviousness. Therefore, we conclude that the Board did not err in rejecting the claims for obviousness over Ericson in view of Kohn and we affirm the Board's decision.

No costs.

APPENDIX B

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte DEREK J. LACKEY

Appeal 2009-1060
Application 10/908,004
Technology Center 3700

Decided:[1] May 28, 2009

Before WILLIAM F. PATE, III, JENNIFER D. BAHR, and FRED A. SILVERBERG, Administrative Patent Judges.

SILVERBERG, Administrative Patent Judge.

---

[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 (2002) from a rejection of claims 1-20, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We AFFIRM.

THE INVENTION

The Appellant's claimed invention is directed to a metallic air admittance valve usable with any plumbing system having one or more waste water discharge devices (Spec.:[Para 7]). Claim 1, reproduced below, is representative of the subject matter on appeal.

> 1. An air admittance valve having a tubular body with a valve chamber integral to one end of the tubular body, said valve chamber having a valve and an air inlet, wherein the tubular body and the valve chamber are fabricated from metal.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Burke	US 2,347,988	May 2, 1944
Ericson	US 4,535,807	Aug. 20, 1985
Bethune	US 4,811,753	Mar. 14, 1989
Kohn	US 6,845,527 B1	Jan. 25, 2005

The following rejections by the Examiner are before us for review:

1. Claims 1, 2, 11 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ericson.
2. Claims 1-3, 7, 11-13 and 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bethune.
3. Claims 1, 2, 4, 8, 11, 12, 14 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Burke.
4. Claims 1-3, 5-7, 9-13, 15-17, 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ericson in view of Kohn.

ISSUES

The issues before us are whether the Appellant has shown that the Examiner erred in rejecting claims 1, 2, 11 and 12 over Ericson; claims 1-3, 7, 11-13 and 17 over Bethune; claims 1, 2, 4, 8, 11, 12, 14 and 18 over Burke; and claims 1-3, 5-7, 9-13, 15-17, 19 and 20 over Ericson in view of Kohn. These issues turn on whether: (1) The Appellant's claim construction of the term air admittance valve as called for in claims 1-20 is reasonable; (2) Ericson's valve is made out of metal; (3) Kohn is non-analogous art; and (4) it would have been obvious to combine the teachings of Ericson and Kohn to make Ericson's valve out of copper, black steel and cast iron.

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc.* v. *Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary

standard for proceedings before the Office).

1. The Appellant's Specification discloses that an air admittance valve is essentially an air check valve that is usually attached near the trap of a fixture. The air admittance valve permits air flow into a drain waste vent system, thereby preventing the siphoning of a trap, but does not permit sewer gases to escape (Spec.:[Para 2]).

2. Ericson discloses an air valve having a valve body 1 connected to an air duct (col. 1, l. 42), a valve chamber 14, an air inlet 5, and a membrane or annular flap (valve) 6 (fig. 1).

3. Ericson further discloses that the air valve is used in combination with a sanitary appliance, wherein the air valve eliminates a partial vacuum that can lead to contaminated water from the sanitary appliance being sucked therein (col. 2, ll. 26-34).

4. Bethune discloses a recreational vehicle drain vent including a sink drain pipe 11; a tubular housing 22 formed of copper (col. 3, l. 34); a check valve 31 including a ball 33, a cage 34 and a valve seat 35; and an annular passageway 40.

5. Burke discloses a valve 10, a threaded coupling 15 (p. 2, col. 1, ll. 22-23), a passage (valve chamber) 16, a multiple valve element 40 (p. 2, col. 2, ll. 45-49), air apertures 28 (p. 2, col. 1, ll. 65-71), wherein the valve 10 is made of brass (p. 1, col. 2, l. 46) and allows flow in one direction (p. 4, col. 2, ll. 7-20).

6. Burke further discloses that an object of the invention is to extend the valve's use to

household water supply systems, wherein the risks of contaminating the water supply by the back-flow of water, sewage or contaminated water upon the failure of the pressure head in the supply side of the system are present (p. 1, col. 1, ll. 18-29).

7. Burke still further discloses that another object of the invention is to provide a valve of the just mentioned character that will be adapted also for industrial uses, such as tanks or the like, wherein the hydraulic system has inherently the risk of back flow upon loss or failure of head or pressure upon one side of the system (p. 1, col. 1, ll. 29-37).

8. Burke still further discloses that still another object of the invention is to provide a valve that will provide multiple safeguards against or controls of flow of liquid or of air from the atmosphere or both, to prevent back flow or syphonic action (p. 1, col. 1, ll. 38-43).

9. Kohn discloses that it is a principal object that his invention be used with all plumbing fixtures to produce a reliable drainage system for a building and can be fabricated in a multitude of materials typical of plumbing fixture fabrication: copper, black steel and cast iron (col. 2, ll. 17-22).

10. The ordinary meaning of the word "check valve" includes "a valve that permits flow in one direction." *Merriam-Webster's Collegiate Dictionary* (10th ed. 1996).

11. The ordinary meaning of the word "sanitary" includes "of, or relating to, or used in the

disposal of sewage." *Merriam-Webster's Collegiate Dictionary* (10th ed. 1996).

PRINCIPLES OF LAW

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the prima facie case with evidence of secondary indicia of nonobviousness.") (quoting In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

"Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention." *RCA Corp.* v. *Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984). In other words, "[t]here must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic & Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time

the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.").

In *KSR*, the Supreme Court stated that "when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result (citing *United States v. Adams*, 383 U.S. 39 S. Ct. 708 (1966)). Id at 416.

In *KSR*, the Supreme Court stated that "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *Id* at 418. The Court noted that "[t]o facilitate review, this analysis should be made explicit." *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot

be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness")). However, "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.*

When construing claim terminology in the United States Patent and Trademark Office, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004).

> The analogous-art test requires that the Board show that a reference is either in the field of the applicant's endeavor or is reasonably pertinent to the problem with which the inventor was concerned in order to rely on that reference as a basis for rejection. References are selected as being reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art.

In re Kahn, 441 F.3d 977, 986-87 (Fed. Cir. 2006) (citation omitted). "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379-1380 (Fed. Cir.

2007) (citation omitted). "[F]amiliar items may have obvious uses beyond their primary purposes...." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 420 (2007).

ANALYSIS

Rejection of claims 1, 2, 11 and 12 under 35 U.S.C. 102(b) as being as being anticipated by Ericson

Appellant contends that Ericson does not disclose a valve body and a housing fabricated from metal (Br. 9). Appellant further contends that the 45 degree crosshatchings in Ericson are general purpose crosshatchings that indicate the surface has been cut and not that the element has been fabricated from metal (Br. 9). Appellant cites to several pages of a book on engineering drawing and design submitted along with a Declaration of Gregory T. Zalecki on December 18, 2006, which references the pages in support of his contention (Br. 9-10). Ericson discloses an air valve having a valve body 1 connected to an air duct (col. 1, l. 42), a valve chamber 14, an air inlet 5, and a membrane or annular flap (valve) 6 (fig. 1) (Fact 2). Patent drawings are submitted to the USPTO in accordance with 35 U.S.C. § 113, 37 C.F.R. § 1.84 and the Manual of Patent Examining Procedure (MPEP) section 608.02. MPEP section 608.02 sets forth a drawing standard wherein 45 degree crosshatchings are used in the drawings to indicate that an element is made of metal. The MPEP contained the 45 degree crosshatchings drawing standard prior to the filing of the Ericson's invention. Further, there is a presumption that all patent drawings filed in the USPTO have followed MPEP section 608.02. Nothing

has been found in Ericson to indicate that the 45 degree crosshatchings drawing standard was not followed. It is our finding that Ericson's elements that include 45 degree crosshatchings are metal to a preponderance of the evidence. Therefore, we agree with the Examiner's finding (Ans. 4-5) that the valve body and housing shown in Ericson's drawings as including 45 degree crosshatchings indicate that the valve body and housing were fabricated from metal. Regarding claims 2 and 12: Appellant further contends that Ericson does not disclose a vent pipe coupler. Ericson discloses in column 1, lines 41-43 that the valve body is connected to an air duct (not shown). Both an air duct and a vent pipe contain air flowing therethrough. We find that an air duct is the equivalent of a vent pipe. Therefore, we agree with the Examiner's finding (Ans. 5-6) that since Ericson discloses in column 1, lines 41-43 that the valve body is connected to an air duct (not shown), that Ericson discloses some mechanism to couple the valve body to the air duct (vent pipe), wherein that mechanism is a vent pipe coupler. Therefore, we conclude that the Examiner did not err in rejecting claims 1, 2, 11 and 12 over Ericson. We affirm the rejection of claims 1, 2, 11 and 12 under 35 U.S.C. § 102.

Rejection of claims 1-3, 7, 11-13 and 17 under 35 U.S.C. 102(b) as being as being anticipated by Bethune

Appellant contends that Bethune does not disclose an air admittance valve (Br. 12). Appellant cites to a 2003 Michigan Plumbing Code section 2002 submitted along with a Declaration of Gregory T.

Zalecki on December 18, 2006, which notes that the 2003 Michigan Plumbing Code provides a specific definition of an air admittance valve. We find nothing on the record that proves that the 2003 Michigan Plumbing Code section 2002 definition for an air admittance valve is the generally accepted definition in the field or that the definition is the appropriate definition for an air admittance valve in these specific claims on appeal. We note that there is no expert testimony to assure us that the definition is applicable in the instant application. In fact, we find that Appellant's Specification provides another, differing definition of an air admittance valve, that is, Appellant's Specification defines an air admittance valve as essentially an air check valve that is usually attached near the trap of a fixture, wherein the air admittance valve permits air flow into a drain waste vent system, thereby preventing the siphoning of a trap, but does not permit sewer gases to escape (Spec.:[Para 2]) (Fact 1). Therefore, we will rely on the definition of an air admittance valve provided by the Appellant's Specification at Para 1 (Fact 1).

Bethune discloses a recreational vehicle drain vent including a sink drain pipe 11; a tubular housing 22 formed of copper (col. 3, l. 34); a check valve 31 including a ball 33, a cage 34 and valve seat 35; and an annular passageway 40 (Fact 4). Therefore, since an air admittance valve is essentially an air check valve (Fact 1), we find that Bethune's recreational vehicle drain vent, which includes check valve 31 (Fact 4), discloses an air admittance valve as called for in claims 1 and 11.

Regarding claims 2 and 12: Appellant further

contends that Bethune does not disclose a vent pipe coupler. Bethune discloses a housing 22 having an externally threaded coupling 23. We agree with the Examiner's analysis (Ans. 9) that Bethune's threaded coupling 23 is capable of attaching to a vent pipe and. Therefore, Bethune's threaded coupling 23 is considered to be a vent pipe coupler as called for in claims 2 and 12. Regarding claims 3, 7, 13 and 17: We find that Appellant has not contested the Examiner's finding (Ans. 3) that Bethune discloses the tubular body and the valve chamber being made of copper (Fact 4). Therefore, we conclude that the Examiner did not err in rejecting claims 1-3, 7, 11-13 and 17 over Bethune. We affirm the rejection of claims 1-3, 7, 11-13 and 17 under 35 U.S.C. § 102.

Rejection of claims 1, 2, 4, 8, 11, 12, 14 and 18 under 35 U.S.C. 102(b) as being as being anticipated by Burke

Appellant contends that Burke does not disclose an air admittance valve for the same reasons as set forth above regarding Bethune (Br. 12). For our reasons previously set forth regarding the rejection based upon Bethune, we will rely on the definition of an air admittance valve provided by the Appellant's Specification at Para 1 (Fact 1). Burke discloses a valve 10, a threaded coupling 15 (p. 2, col. 1, ll. 22-23), a passage (valve chamber) 16, a multiple valve element 40 (p. 2, col. 2, ll. 45-49), air apertures 28 (p. 2, col. 1, ll. 65-71), wherein the valve 10 is made of brass (p. 1, col. 2, l. 46) and allows flow in one direction (p. 4, col. 2, ll. 7-20 (Fact 5). Burke further discloses that an

object of the invention is to extend the valve's use to household water supply systems, wherein the risks of contaminating the water supply by the back-flow of water, sewage or contaminated water upon the failure of the pressure head in the supply side of the system are present (p. 1, col. 1, ll. 18-29) (Fact 6). Burke still further discloses that another object of the invention is to provide a valve of the just mentioned character that will be adapted also for industrial uses, such as tanks or the like, wherein the hydraulic system has inherently the risk of back flow upon loss or failure of head or pressure upon one side of the system (p. 1, col. 1, ll. 29- 37 (Fact 7). Burke still further discloses that still another object of the invention is to provide a valve that will provide multiple safeguards against or controls of flow of liquid or of air from the atmosphere or both, to prevent back flow or syphonic action (p. 1, col. 1, ll. 38-43) (Fact 8). The ordinary meaning of the word "check valve" includes "a valve that permits flow in one direction." Merriam-Webster's Collegiate Dictionary (10th ed. 1996) (Fact 10). Therefore, in order for a valve to be a check valve it must permit flow in only one direction. We find that since Burke's valve 40 permits flow in only one direction (Fact 5), it is a check valve. Therefore, since an air admittance valve is essentially an air check valve (Fact 1), we find that Burke's valve 10 is an air admittance valve as called for in claims 1 and 11.

Regarding claims 2 and 12: Appellant further contends that Burke does not disclose a vent pipe coupler. Burke discloses an extension 11 having external threads 12 for coupling to a pipe line (p. 1, col. 2, l. 48-p. 2, col. 1, l. 7). We agree with the Examiner's

analysis (Ans. 9) that Burke's threaded extension 11 is capable of attaching to a vent pipe and, therefore, Burke's threaded extension 11 is considered to be a vent pipe coupler as called for in claims 2 and 12. Regarding claims 4, 8, 14 and 18: We find that Appellant has not contested the Examiner's analysis (Ans. 3) that Burke discloses the tubular body and the valve chamber being made of brass (Fact 5). Therefore, we conclude that the Examiner did not err in rejecting claims 1, 2, 4, 8, 11, 12, 14 and 18 over Burke. We affirm the rejection of claims 1, 2, 4, 8, 11, 12, 14 and 18 under 35 U.S.C. § 102.

Rejection of claims 1-3, 5-7, 9-13, 15-17, 19 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Ericson in view of Kohn

Appellant contends that Ericson does not disclose an air admittance valve as called for in claims 1 and 11 (Br. 17). Appellant further contends that neither Ericson nor Kohn discloses a metallic vent pipe coupler attached to a tubular body as called for in claims 2 and 12 (Br. 17). Appellant still further contends that Kohn is non-analogous art (Br. 17). For the reasons set forth above in our discussion of the rejection of claims 1, 2, 11 and 12 as being anticipated by Ericson, Appellant's contention regarding Ericson not disclosing an air admittance valve and not disclosing a metallic vent pipe coupler attached to a tubular body as called for in claims 2 and 12 is not persuasive. Ericson discloses an air valve having a valve body 1 connected to an air duct (col. 1, l. 42), a valve chamber 14, an air inlet 5, and a membrane or

annular flap (valve) 6 (fig. 1) (Fact 2). Ericson does not disclose that the body and the chamber are fabricated from copper, black steel and cast iron as called for in claims 3, 5-7, 9, 13, 15-17, 19, and 20, respectively. Ericson further discloses that the air valve is used in combination with a sanitary appliance (col. 2, ll. 26-34) (Fact 3). Kohn discloses that it is a principal object that his invention be used with all plumbing fixtures to produce a reliable drainage system for a building and can be fabricated in a multitude of materials typical of plumbing fixture fabrication: copper, black steel and cast iron (col. 2, ll. 17-22) (Fact 9). The ordinary meaning of the word "sanitary" includes "of, or relating to, or used in the disposal of sewage." Merriam-Webster's Collegiate Dictionary (10th ed. 1996) (Fact 11). Therefore, we find that a sanitary appliance is a plumbing fixture. Since both Ericson and Kohn disclose that their inventions are used with plumbing fixtures, we find that both Ericson and Kohn are from the same field of endeavor. Therefore, we find that Ericson and Kohn are analogous art. *See In re Kahn* at 986-978. We conclude that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the teachings of Ericson and Kohn as set forth by the Examiner (Ans. 4) by making Ericson's metallic valve out of either copper, black steel or cast iron as taught by Kohn. In *KSR* the Supreme Court held that a simple substitution of one known element for another known in the field to obtain predictable results is obvious. *See KSR*, 550 U.S. at 416. The substitution proposed by the Examiner is simply the substitution of one known particular metal for a generic metal to obtain

predictable results. Therefore, we conclude that the Examiner did not err in rejecting claims 1-3, 5-7, 9-13, 15-17, 19 and 20 over Ericson in view of Kohn. We affirm the rejection of claims 1-3, 5-7, 9-13, 15-17, 19 and 20 under 35 U.S.C. § 103.

CONCLUSION

We conclude that the Appellant has not shown that the Examiner erred in rejecting claims 1, 2, 11 and 12 under 35 U.S.C. § 102(b) as being anticipated by Ericson; claims 1-3, 7, 11-13 and 17 under 35 U.S.C. § 102(b) as being anticipated by Bethune; claims 1, 2, 4, 8, 11, 12, 14 and 18 under 35 U.S.C. § 102(b) as being as anticipated by Burke; and claims 1-3, 5-7, 9-13, 15-17, 19 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Ericson in view of Kohn.

DECISION

The decision of the Examiner to reject claims 1, 2, 11 and 12 over Ericson; claims 1-3, 7, 11-13 and 17 over Bethune; claims 1, 2, 4, 8, 11, 12, 14 and 18 over Burke; and claims 1-3, 5-7, 9-13, 15-17, 19 and 20 over Ericson in view of Kohn is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

LV:

GREGORY T. ZALECKI
12900 HALL ROAD
SUITE 400
STERLING, HEIGHTS MI 48313

APPENDIX C

United States Court of Appeals for the Federal Circuit

2009-1532
(Serial No. 10/908,004)

IN RE DEREK J. LACKEY

Appeal from the United States Patent and Trademark Office, Board of Patent Appeals and Interferences.

Judgment

ON APPEAL from the UNITED STATES PATENT AND TRADEMARK OFFICE, BOARD OF PATENT APPEALS AND INTERFERENCES

in CASE NO(S).

This CAUSE having been heard and considered, it is

ORDERED and ADJUDGED:

AFFIRMED

ENTERED BY ORDER OF THE COURT
DATED APR - 9 2010 /s
Jan Horbaly, Clerk
ISSUED AS A MANDATE: Jun -1 2010